Poverty in Canada and the United States: measurement, trends, and implications

Lars Osberg  Department of Economics, Dalhousie University

1. Introduction

Although Canada and the United States are two of the richest countries in the world, many Canadians and Americans perceive themselves, and are perceived by others, to be poor – which raises the issue of how best to measure poverty. Within Canada, there are widespread worries that the self-image of Canada as a place with relatively little poverty (somewhat ‘kinder and gentler’ than the United States), may be a bit outdated (see Graves, Dugas, and Beauchamp 1999; Angus Reid 1999). Poverty in Canada has been rising, while in the United States it has been falling in recent years – which raises the issues of why that has been happening and what it will mean, in the longer term, for Canada and the United States as a whole.

In this paper, therefore, I begin by asking how poverty in affluent countries should be measured, before examining recent evidence on poverty intensity and its social significance. In section 1 the use of the Sen-Shorrocks-Thon index of poverty intensity is advocated, and the ‘Poverty Box’ is introduced as a summary graphical representation. In section 2 recent data are presented on poverty in Europe and North America, and it is noted that between 1994 and 1997 Canadian provinces became quite similar to many U.S. states in poverty intensity. A fixed effects model is used in section 3 to examine whether changes in trade exposure, the unemployment rate, unemployment insurance, and social assistance are significant determi-
nants of these changes in poverty intensity. In section 4 the paper is concluded with a discussion of the social significance of income poverty and its relationship to social exclusion and fundamental human rights.

1.1. What is ‘poverty’?
In common language usage, poverty is about deprivation of necessities – the primary dictionary definition of ‘poverty’ is ‘want of the necessities of life’ Oxford (1998, 1135). But what are the ‘necessities of life’? In my view, Adam Smith had the answer more than 200 years ago: ‘Under necessaries, therefore, I comprehend not only those things which nature, but those things which the established rules of decency have rendered necessary to the lowest rank of people’ (vol. 2, bk. v, ch. ii, pt ii, art iv, 400). Although Smith was writing at a time when real living standards were a fraction of today’s, he was in no doubt that prevailing social norms are crucial to the definition of ‘necessities’ – and that social norms change over time, and differ across countries. More recently, Sen has put it fairly elegantly: Relative deprivation in the space of incomes can yield absolute deprivation in the space of capabilities. In a country that is generally rich, more income may be needed to buy enough commodities to achieve the same social functioning, such as “appearing in public without shame.” The same applies to the capability of “taking part the life of the community” (1992, 115 emphasis in original).

The practical problem, nonetheless, is how to define ‘want of necessities.’ In the literature, some have emphasized specific named commodities or total consumption, but most authors have focused on the income sufficient to purchase necessities. Given the dimensionality of measurement, there is the twin problem of how to draw the poverty line initially and how to revise it over time. A separable issue is where to draw the poverty line. A lot of discussion has revolved around whether the poverty line should be seen as ‘absolute’ or as ‘relative.’

The essential difference between these approaches is transparency. The ‘relative’ approach to poverty measurement ties the poverty line explicitly to some aspect of the distribution of income, while ‘absolute’ poverty lines are based on a market basket of goods, which, both initially and when revised, is implicitly linked to the prevailing income distribution – but not in a clear way.

A ‘relative’ poverty line that is drawn as half the median income, or 40 per cent of the average, is quite obvious about its link to current social data.1 The Low Income Cut-Off (LICO) methodology of Statistics Canada is equally clear about

---

1 Poverty and inequality are different issues, whether the poverty line is drawn using a relative or an absolute methodology, since inequality statistics are inevitably dominated by the non-poor, who remain a large majority of the population however the poverty line is drawn. Even if the poverty line is drawn in a purely relative way, poverty can be eliminated at the same time as inequality is rising. For example, a society that started with a distribution of income like [4,7,10,15,25] would have a poverty rate of 20 per cent if the poverty line was set at half the median. A series of transfers that produced the distribution [6,7,10,11,27] would both eliminate relative poverty and increase economic inequality (as measured by the co-efficient of variation). In cross-country comparisons, there is a far from perfect correlation (0.79) between poverty intensity and the Gini Index of inequality (see Osberg and Xu 2000, 68–9).
its link to the percentage of income spent on necessities by average Canadian households.\(^2\) If drawn by individual researchers, the ‘market basket method’ may be generous or stingy, depending on the propensity of the researcher, but in practice the researcher always has an idea of socially acceptable living standards. Minimum standards of housing, diet, and clothing are inevitably influenced by the society in which the analyst lives. As Saunders comments, in setting Australian budget standards: ‘Normative patterns must to some extent reflect the actual behavioural patterns of the population if their relevance is not to be severely circumscribed. In the area of food, for example, a diet consisting of lentils and brown rice may meet the dietary guidelines, but be of little relevance to the actual eating habits of the vast majority of Australians’ (1998, 7).

Since market baskets are constructed by a variety of agencies, however, their problem is that the link to ‘normal living’ is implicit, occasional, and idiosyncratic, rather than explicit, continuously updated, and standardized. The ‘absolute’ approach derives much of its political appeal from its supposed objectivity – that is, lack of transparency – but in 1992 available market basket estimates for a poverty line for a family of four in Toronto ranged from $18,342 to $30,402.\(^3\) Furthermore, once the poverty line is drawn, the next issue is how to revise it over time as prices, commodity availability, and the incomes of society change. Again, transparency is the crucial difference. As Fisher (1995, 3) has documented: ‘When one turns to the context of actual history, there is an impressive body of empirical evidence from the United States, Britain, Canada and Australia that successive poverty lines developed as absolute poverty lines show a pattern of getting higher in real terms as the real income of the general population rises’ (emphasis in original).

Part of the reason why the ‘established rules of decency’ evolve over time is the availability of new commodities (such as the telephone or television), which rapidly become part of everyday expectations and social life. As average incomes rise, legal standards and market structure change, making some cheap old goods and services unavailable (such as houses with outdoor plumbing or stores that one can walk to).

\(^2\) The LICO is based on the idea of ‘very little disposable income’ – that is, after controlling for city and family size, the expected expenditure share of food, clothing, and shelter is more than 20 per cent greater than the Canadian average. It is updated from year to year, using only the CPI, in the same manner as an ‘absolute’ poverty line, but is rebased periodically (most recently in 1992) with reference to changes in average consumption proportions, as a ‘relative’ poverty line would be (see Wolfson and Evans 1989; Cotton, Webber, and Saint-Pierre 1999). Short et al. (1999) discuss the sensitivity of the U.S. official poverty lines to measurement choices. Initially set in 1963 at three times the level of a ‘subsistence’ food budget, it has been adjusted only for price increases. See Focus (1998).

\(^3\) In U.S. dollars at purchasing power parity, $14,490 to $24,017. In Vancouver in 1996 the range of market basket poverty lines for a four-person family was not quite as large – from $20,354 to $27,266 (Cdn $, = US $16,221 to $21,540 at ppp); see National Council of Welfare (1999, 23). These values can be contrasted with the poverty lines used in this paper, which are (with U.S. dollar value for a four-person family in 1994 and 1997 in parentheses): the Social Security official poverty line ($16,083, $16,400); the LICO before tax ($22,037, $22,197) and one half the median equivalent income after tax ($18,061 and $20,766 in the United States; $18,494 and $18,588 in Canada).
In addition, consumption norms (e.g., children sharing the same bed) change over time. Direct evidence on the evolution of social norms comes from the repetition, since 1946, of the Gallup poll question: ‘What is the smallest amount of money that a family of four needs each week to get along in this community?’ Osberg (1984, 70) noted that the average answer tracks median male earnings rather well.\footnote{Fisher (1995, 8) summarizes the debate on the exact size of the income elasticity of the poverty line; see also Short et al. (1999, 14). As a practical matter, the distinction between updating the poverty line to reflect price increases or increases in median real income will be unimportant during periods (such as 1980 to 1994; see Osberg 2000, 13, 20) when there is little change in median real incomes. However, the updating method made a big difference in the 1960s and early 1970s. Prior to 1980 growth of median real incomes meant that updating the official U.S. poverty line only for price increases produced a decline from its initial level of 49 per cent of median income to about 35 per cent (for a four-person family); see Ruggles (1990, 30–61); Osberg (1984, 61–72).

For all these reasons, in this paper I will use the commonly accepted international standard that the poverty line is one-half median equivalent individual income and that the number of equivalent adults in each household can be calculated as the square root of household size. The equivalent income of each household member is calculated as household money income (including the value of near-cash benefits, such as food stamps) after taxes and transfers, divided by the number of equivalent adults.\footnote{Disposable income consists of the sum of gross wages and salaries, farm self-employment income, non-farm self-employment income, cash property income, sick pay, disability pay, social retirement benefits, child or family allowances, unemployment compensation, maternity pay, military/veteran/war benefits, other social insurance, means-tested cash benefits, near cash benefits, private pensions, public sector pensions, alimony or child support, other regular private income, and other cash benefits; minus mandatory contributions for self-employed, mandatory employee contribution, and income tax.}

The use of this concept of poverty implies a considerably lower poverty rate than use of the LICO, and 50 per cent of the median can be criticized as too low. (At $20,766 (US) for a four-person family in the United States in 1997, it is well below Bernstein, Brocht, and Spade-Agular’s (2000 3, 51) estimate of a basic market basket in Baltimore of $30,976 (after tax), or the $28,182 average (after tax) of eighteen separate basic market basket calculations across the United States.) However, it does enable a clear basis for international comparisons. Furthermore, although the calculated level of poverty changes, rankings of provinces and states are not much affected by choice of poverty line. As Osberg and Cyrus (2000) demonstrate, whichever poverty line is selected, the correlation of poverty across Canadian provinces and U.S. states is extremely high ($R^2 = 0.95$ or greater).

Most poverty research (including this paper) in the end submits to the constraints of the data and assumes that all individuals within households share equally in household resources and have no claim on the resources of other households. These are strong assumptions about the social context of income flows. Since people typically live in households and share consumption to some degree, the effective resources available to each person depend on the degree of inequality in the intra-household distribution of consumption. Phipps and Burton (1995, 194) have demonstrated the potential importance of inequality within the family – the same
Canadian family income data are consistent with a child poverty rate (for two-parent families) of as little as 5.9 per cent if resources are equally shared or as much as 52.1 per cent if resource sharing is minimal. However, these issues are not addressed in this paper.

1.2. Summary measures of poverty

In the popular press, the poverty rate (the percentage of the population whose incomes lie below the poverty line) is the most commonly encountered poverty measure, supplemented occasionally by reference to the average poverty gap ratio (the average percentage shortfall of poor individuals’ incomes below the poverty line). Sen (1976), however, noted that the former measure is insensitive to the depth of poverty, and the latter ignores the number of poor individuals (and neither statistic is transfer sensitive). Since then, the academic literature has gone in two directions. One strand (e.g., Davidson and Duclos 2000; Xu and Osberg 1998) has urged the use of dominance criteria and examination of the distribution of deprivation as a whole, while others (e.g., Blackorby and Donaldson 1980; Foster, Greer, and Thordarson 1984) have attempted to establish a single index that is an ethically defensible aggregate measure of poverty.

Any single index number of poverty will embody a specific weighting of the deprivation of different poor people and will therefore correspond to a specific social welfare function. One can avoid specifying a particular social welfare function or a particular poverty line, however, by comparing the distribution of deprivation of poor people, but a major problem with the deprivation dominance literature is its inaccessibility. Although it can be argued that poverty measurement is pointless if the measures are never used in any policy debate, relatively few people (in academia or outside) fully understand what ‘stochastic dominance’ means in practical terms. Furthermore, the establishment of a dominance relation, by itself, is not very informative, since people often want to know the size of policy impacts, as well as the sign. As a consequence, deprivation dominance criteria are little used outside academia.

Hagenaars (1986, 1991) and Zheng (1997) have summarized the properties that an ethically defensible index of poverty should possess.6 A particularly important consideration is that an acceptable measure of poverty should always register an increase in poverty whenever a pure transfer of income is made from someone below the poverty line to someone who has more income. This property is not possessed by the poverty rate, the poverty gap, or, as originally formulated, the Sen index. To address this issue, Shorrocks (1995) proposed a modified Sen index, but since it is identical to the limit of Thon’s (1979) index, this paper refers henceforth to the Sen-Shorrocks-Thon (SST) index of poverty intensity.

---

6 Generally summarized as focus, monotonicity, symmetry, replication invariance, transfer sensitivity and replication invariance; see Zheng (1997).
The SST index of poverty intensity combines the poverty rate, average poverty gap ratio, and inequality in poverty gaps. Osberg and Xu (2000) show that it can be decomposed as

\[\text{SST} = \text{RATE}\times\text{GAP}\times(1 + \text{G}(X)).\]  

(1)

It is often useful to transform equation (1) into

\[\ln(\text{SST}) = \ln(\text{RATE}) + \ln(\text{GAP}) + \ln(1 + \text{G}(X)),\]  

(2)

where the term \(\ln(1 + G(X))\) is an approximate of \(G(X)\) based on the first-order Taylor series expansion.

When poverty over time or across jurisdictions is compared, the percentage difference in poverty intensity can therefore be expressed as the sum of the percentage differences in the poverty rate, average poverty gap ratio (among the poor), and Gini index of inequality in the poverty gap ratios (among all people).

\[\Delta\ln(\text{SST}) = \Delta\ln(\text{RATE}) + \Delta\ln(\text{GAP}) + \Delta\ln(1 + \text{G}(X)),\]  

(3)

where \(\Delta\ln(1 + G(X))\) is an approximation of \(\Delta G(X)\).

In practice, changes over time (or differences between countries or Canadian provinces) in the inequality of poverty gaps \([1 + G(X)]\) are empirically very small, especially when compared with differences in the poverty rate and average poverty gap. Hence, the percentage change in poverty intensity can be approximated as the sum of the percentage changes of the poverty rate and the average poverty gap ratio.

One of the problems of the poverty literature is a disconnect between academia and the popular debate. Although theoretical advances in poverty measurement have been made in the academic community, 'Standard academic practice and public policy debates . . . have been scarcely touched by these developments' (Myles and Picot 2000, 1). Overwhelmingly, the poverty rate remains the statistic of choice, for all its flaws.

7 'RATE' is the percentage of the population with incomes below the poverty line (sometimes called the head count ratio), 'GAP' is the average percentage gap between the incomes of the poor and the poverty line, and \(G(X)\) is the Gini index of inequality of the poverty gap among all people, where the poverty gap of the non-poor is set to zero. Xu and Osberg (2000) discuss the Social Welfare Function implicit in the SST index.

8 Across LIS countries the coefficient of variation of poverty rates is 0.493, and for average poverty gap ratios it is 0.185. However, the coefficient of variation of \((1 + G(X))\) is only 0.014 (Osberg and Xu 2000, 72). For Canadian provinces and U.S. states in 1997 the CV is 0.341 for the SST index, 0.384 for the poverty rate, 0.141 for the poverty gap ratio, and 0.011 for \((1 + G(X))\); see also Osberg and Xu (1999a). The 'common sense' explanation for the unimportance of inequality among the poor in an aggregate measure of poverty intensity is that the differences in income among the poor are small compared with income differences among the non-poor. The upper bound on the incomes of poor people is the poverty line. The lower bound, (leaving aside measurement error), is subsistence. The dollar value of the difference is not large, particularly compared with the dollar differences among the non-poor population. See Osberg and Xu (2000, 57) and Xu and Osberg (2000) for geometric proof.
Equations (1) and (3), however, provide a straightforward decomposition of a more defensible index of poverty intensity, which can be readily interpreted by policy makers, social science researchers, and the general public. Equation (3) can be easily expressed verbally – for small changes, the percentage change in poverty intensity is the sum of the percentage change in the poverty rate and the percentage change in the poverty gap. Equation (1) has a simple graphical interpretation. Poverty intensity, like the volume of a box, is the product of three factors: RATE, GAP, and \( (1 + G(X)) \).\(^9\) Indeed, since the final term (representing inequality in poverty gaps among all persons) is virtually constant in empirical work, the Poverty Box can be represented in two dimensions as the product of RATE and GAP – that is, the area of a rectangle whose height is the average poverty gap ratio and whose width is the poverty rate.

In figure 1 Poverty Box comparisons of Finland, Canada and the United States are presented. The relative level and convergent trend of poverty intensity in Canada and the United States from 1994 to 1997 show up clearly. Since humans are better at extracting relative size information from graphs than from arrays of numbers, the Poverty Box offers an efficient way of presenting aggregate information as well as enabling readers to disentangle the influence of changes in the rate, or the gap, on total poverty intensity.

Myles and Picot (2000, 4) have commented: ‘A typical frustration of policy-makers is that incremental efforts to raise the incomes of the most indigent often have little impact on the poverty rate. The temptation in this situation is to move the goal posts to a lower poverty standard in the (usually misguided) hope that a lower cut-off will register the change. Changes that affect the most indigent are always reflected in measures of poverty intensity.’ The use of a better measure of outcomes may obviate the tendency to ‘move the goalposts’ and it may also have substantive policy implications. As Focus (1998, 4) has pointed out: ‘According to conventional wisdom, U.S. antipoverty programs have not “worked.”’ – a perception that is driven by trends in the poverty rate. However, policy makers are under pressure both to ‘show results’ and to provide aid to the most indigent. If they follow Rawls (1971) and focus effort on the least well off, their successes will often be statistically invisible, since the poverty rate does not reflect the improvement in well-being that comes with a reduction in the poverty gap. A better measure of poverty – such as poverty intensity – may therefore be important in avoiding ‘false negatives’ in policy analysis.

2. Recent developments in poverty intensity

Figure 2 uses Luxembourg Income Study data to present the point estimate and 95 per cent confidence interval of the SST index of poverty intensity between 1994

\(^9\) Because the SST index is defined in terms of poverty gaps, it is robust under data contamination in the sense of Cowell and Victoria-Feser (1996), especially so when the poverty line is set with reference to median income.
Note: The SST Index of Poverty Intensity = (Rate)/(Gap)*(1+G(X)) where G(X)=Gini coefficient among all persons of poverty gap ratios.
Because1+ G(X) is nearly constant, it is not shown explicitly.
Source: calculations by author using Luxembourg Income Study and Survey of Consumer Finance (households) data.

FIGURE 1  The poverty box: Poverty intensity in Canada, the United States, and Finland; Poverty Line = 1/2 Median After-Tax Equivalent Income
FIGURE 2 Poverty intensity from 1994 to 1997

Sources: Author's calculations using the Luxembourg Income Study and the Survey of Consumer Finances-Households (Canada).
Poverty line = 1/2 median equivalent after tax, after transfer income; equivalence scale is the square root of the number of persons in the household.

Note: [95% confidence interval = mean +/- 2 standard deviations] of 300 bootstraps
and 1997 in a cross-section of countries. In table 1 the exact numbers and a breakdown of poverty in Canada and the United States among those over and under age 65 are presented. The change in poverty intensity in the United States (down) and in Canada (up) from 1994 to 1997 is noteworthy, but it is also clear that in the same time period north European countries (e.g., Germany, Norway, or Finland) continue to have significantly less poverty than either Canada or the United States. The range of variation within Europe is quite substantial. Finland’s poverty intensity (1.96) in 1995 was some seven points below the level in Italy (9.03).

Although, on a national basis, Canada has less poverty than the United States, differences in national poverty intensity between the two countries emerged only within the last thirty years. Poverty intensity in Canada was statistically indistinguishable from that of the United States in the early 1970s (see Osberg and Xu 2000) and likely was higher in the 1960s. Over the period 1971 to 1994 Canadian social policy diverged from that in the United States (see Card and Freeman 1993), and Canadian and American poverty intensity moved in different directions. By the mid-1980s Canadian poverty intensity was clearly less than that in the United States at the national level. However, there is substantial variation within each country: in 1997 poverty intensity in Alberta (5.5) was well below that of Newfoundland (9.9), while levels in Indiana (6.2) and Maryland (5.9) were eight points below those in Texas (14.2) and New York (13.9). Furthermore, since Ontario is home to almost 40 per cent of Canada’s population, while California, Texas, New York, and Florida account for 31 per cent of the U.S. population, the decisions of a relatively small number of state and provincial governments have a strong impact on national aggregates.

Furthermore, one of the general lessons from the international literature is the precariousness of the economic position of the poor. As Osberg and Xu (2000, 72) note, there is no general international trend to greater poverty. In Luxembourg Income Study data, the number of statistically significant increases in poverty intensity almost exactly matches the number of declines. However, there are frequent examples of large changes in poverty intensity, within fairly short time frames. It is not difficult to understand why. Since the poor have little to start with, rather small percentage shifts in the distribution of national income can have large impacts on the well-being of the poor.10 As well, since many poor people depend heavily on transfer income, their economic well-being is particularly exposed to shifts in the political winds – both local and national.

Poverty among seniors, however, has followed a different path than among those under age 65. Following the introduction of the Canada Pension Plan and the Guaranteed Income Supplement in 1967, poverty among Canadians over 65 fell dramatically – one of the major achievements of Canadian social policy. Social Security in

---

10 Osberg (2000) notes that if only 10 per cent of the income gains between 1979 and 1995 of the top decile of the United Kingdom and the United States had been transferred to the bottom decile, poverty in both countries in 1994–95 would have been substantially lower than in 1979, instead of substantially higher.
TABLE 1
Poverty intensity, poverty rate, average poverty gap ratio, and Gini coefficient among all persons of poverty gap ratios (bootstrap standard errors in parentheses)

<table>
<thead>
<tr>
<th>SST Rate</th>
<th>Av. poverty gap</th>
<th>(1 + G(x))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Luxembourg (94)</td>
<td>1.456</td>
<td>3.893</td>
</tr>
<tr>
<td>Finland (95)</td>
<td>1.962</td>
<td>5.061</td>
</tr>
<tr>
<td>France (94)</td>
<td>3.390</td>
<td>7.944</td>
</tr>
<tr>
<td>Norway (95)</td>
<td>3.745</td>
<td>6.869</td>
</tr>
<tr>
<td>Germany (94)</td>
<td>4.372</td>
<td>7.498</td>
</tr>
<tr>
<td>Germany minus GDR (94)</td>
<td>5.813</td>
<td>8.548</td>
</tr>
<tr>
<td>Sweden (95)</td>
<td>5.361</td>
<td>6.446</td>
</tr>
<tr>
<td>The Netherlands (94)</td>
<td>6.178</td>
<td>7.873</td>
</tr>
<tr>
<td>United Kingdom (95)</td>
<td>6.649</td>
<td>13.247</td>
</tr>
<tr>
<td>Italy (95)</td>
<td>9.034</td>
<td>14.401</td>
</tr>
<tr>
<td>Australia (94)</td>
<td>8.153</td>
<td>14.401</td>
</tr>
</tbody>
</table>

Canada

<table>
<thead>
<tr>
<th>SST Rate</th>
<th>Av. poverty gap</th>
<th>(1 + G(x))</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994 All</td>
<td>5.891</td>
<td>11.136</td>
</tr>
<tr>
<td>Elderly(≥65)</td>
<td>1.338</td>
<td>4.903</td>
</tr>
<tr>
<td>Non-elderly(&lt;65)</td>
<td>6.465</td>
<td>11.943</td>
</tr>
<tr>
<td>1997 All</td>
<td>7.004</td>
<td>11.843</td>
</tr>
<tr>
<td>Elderly(≥65)</td>
<td>1.570</td>
<td>5.283</td>
</tr>
<tr>
<td>Non-elderly(&lt;65)</td>
<td>7.718</td>
<td>12.730</td>
</tr>
</tbody>
</table>

United States

<table>
<thead>
<tr>
<th>SST Rate</th>
<th>Av. poverty gap</th>
<th>(1 + G(x))</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994 All</td>
<td>12.594</td>
<td>18.526</td>
</tr>
<tr>
<td>Elderly(≥65)</td>
<td>10.232</td>
<td>19.143</td>
</tr>
<tr>
<td>1997 All</td>
<td>10.385</td>
<td>16.813</td>
</tr>
<tr>
<td>Elderly(≥65)</td>
<td>10.785</td>
<td>20.694</td>
</tr>
</tbody>
</table>

SOURCE: Author’s calculations using the Luxembourg Income Study and Survey of Consumer Finance- (Canada)
the United States has a much longer history, but in neither case has there been much change in recent years. These programs imply that the probability of poverty among seniors is driven by a very different (and relatively unchanged) process than poverty among the non-elderly. Furthermore, because seniors typically have no earnings, many of them have much the same income because it is derived from the same source and is calculated by the same benefit formula, producing a distinct ‘spike’ in the distribution of income of the elderly that is quite close to plausible definitions of the poverty line. Since measurement of poverty among seniors is therefore especially sensitive to small variations in income, poverty line, or equivalence scale, in this paper I will henceforth focus primarily on trends in poverty among those under 65.

2.1. Recent developments
As indicated in figure 1, between 1994 and 1997 poverty rose in Canada and fell in the United States. The changing poverty gap and poverty rate among the non-elderly dominated overall trends. In Canada, two-thirds of the increase in poverty was due to a larger poverty gap among the poor, but in the United States most of the improvement came from a fall in the poverty rate. On a national basis, poverty in Canada remained significantly less than that in the United States, but national averages hide a wide variation of outcomes across provinces and states. What trends do we observe at the state and provincial levels?

In figures 3 and 4 poverty intensity in Canadian provinces and U.S. states in 1994 and 1997 are compared. In both figures provinces and states are ranked in order of poverty intensity as calculated when one draws the poverty line at half the median equivalent income of individuals in each country. Using a purchasing power parity exchange rate (0.79), one could also draw the poverty line at the real value of the U.S. official poverty line or at the Canadian Low Income Cut-Off (LICO). In all cases, the qualitative result is much the same. In 1994 almost all Canadian provinces are clustered at the bottom end of the distribution of poverty intensity, but by 1997 Canadian provinces are spread throughout the distribution. This result is strongest for the highest poverty line (the LICO) and least for the lowest (the U.S. official poverty line); Figures 3 and 4 highlight the intermediate case. It therefore appears that Canada’s ‘distinctiveness’ in social outcomes is rapidly eroding. What can explain this?

3. Explanations
In this section an attempt is made to explain the 1994 to 1997 changes in North American poverty intensity, using a fixed effects model. During the 1990s there have been significant changes in both Canada and the United States in macroeconomic conditions, social policy, and international trade exposure, so primary attention is focused on these issues. The results are presented in table 2. In columns 1 and 2 the dependent variable is the change in poverty intensity of states/provinces when the poverty line is drawn relatively, as one-half median equivalent individual
FIGURE 3 Poverty intensity in Canada and the United States for those < 65 years of age, 1994

Sources: Authors' calculations using the Luxembourg Income Study (US) and the Survey of Consumer Finances-Households (Canada). Dollar values converted using purchasing power parities (.79 US $ per Can. $). States and provinces ordered by the SST index using 1/2 the median equivalent after-tax income poverty measure.
FIGURE 4 Poverty intensity in Canada and the United States for those < 65 years of age, 1997

Sources: Authors’ calculations using the Luxembourg Income Study (US) and the Survey of Consumer Finances-Households (Canada). Dollar values converted using purchasing power parities (.79 US $ per Can. $). States and provinces ordered by the SST index using 1/2 the median equivalent after-tax income poverty measure.
TABLE 2
Determinants of the change in poverty intensity in Canada and the United States from 1994 to 1997 for those less than 65 years of age (estimation method GLS)

<table>
<thead>
<tr>
<th></th>
<th>Poverty line = 1/2 median equivalent after-tax income</th>
<th>Poverty line = Canada’s before tax LICO for residence size 100,000–499,999 @ ppp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>−0.617 (0.495)</td>
<td>−3.084* (0.595)</td>
</tr>
<tr>
<td></td>
<td>−0.681 (0.501)</td>
<td>−3.159* (0.602)</td>
</tr>
<tr>
<td>Change in male 25–54 unemployment:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rate</td>
<td>−</td>
<td>0.797** (0.362)</td>
</tr>
<tr>
<td>ln (rate)</td>
<td>3.611** (1.455)</td>
<td>3.445*** (1.731)</td>
</tr>
<tr>
<td>Change in unemployment insurance:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average weekly benefits</td>
<td>−0.039* (0.013)</td>
<td>−0.045* (0.015)</td>
</tr>
<tr>
<td>(1997 Can $)</td>
<td>−0.041* (0.014)</td>
<td>−0.048* (0.016)</td>
</tr>
<tr>
<td>Beneficiaries/unemployed</td>
<td>−5.819*** (3.066)</td>
<td>−7.178** (2.958)</td>
</tr>
<tr>
<td></td>
<td>−10.805* (3.683)</td>
<td>−12.146* (3.549)</td>
</tr>
<tr>
<td>Change in social assistance generosity weekly benefit amount – one parent, one child (Can $)</td>
<td>−0.029*** (0.016)</td>
<td>−0.035** (0.019)</td>
</tr>
<tr>
<td></td>
<td>−0.051* (0.019)</td>
<td>−0.057* (0.019)</td>
</tr>
<tr>
<td>Change in trade:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Import exposure</td>
<td>46.821 (48.535)</td>
<td>56.497 (52.035)</td>
</tr>
<tr>
<td></td>
<td>28.481 (59.793)</td>
<td>36.377 (63.851)</td>
</tr>
<tr>
<td>Export exposure</td>
<td>−73.115 (49.474)</td>
<td>−83.467 (51.034)</td>
</tr>
<tr>
<td></td>
<td>−30.486 (61.091)</td>
<td>−39.889 (62.865)</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>0.355</td>
<td>0.340</td>
</tr>
<tr>
<td></td>
<td>0.490</td>
<td>0.480</td>
</tr>
<tr>
<td>n</td>
<td>60</td>
<td>60</td>
</tr>
</tbody>
</table>

NOTES: Excludes the District of Columbia
* significant with 99 per cent confidence
** significant with 95 per cent confidence
*** significant with 90 per cent confidence

a Sen-Shorrocks-Thon Index (SST), where SST = (Poverty Rate %) * (Relative Poverty Gap) * (1 + \(G(X)\)), where \(G(X)\) = Gini coefficient among all persons of poverty gap ratios
b Generalized Least Squares estimates using bootstrap standard errors
c LIS equivalence scale \([= \text{N}^\frac{3}{2}]\)
d See footnote 5 in text; converted to U.S. dollars using ppps (0.79).
e In the US includes Aid for Families with Dependent Children/Temporary Assistance for Needy Families and food stamps.

after tax income. Since the United States experienced significant growth in median real after-tax income over this period, while Canadian incomes stagnated, a relative poverty line moves up in the United States in real terms, but not in Canada. To check the robustness of results, the results obtained when poverty intensity is measured with respect to a constant real dollar poverty line are reported in columns 3 and 4 (the Statistics Canada’s Low Income Cut Off: 1992 base, city size of 100,000 to 499,999).

The fixed-effects methodology implies that the change in poverty intensity is being compared with the change in possible explanatory variables. As a result, any
systematic measurement error (as in choice of the ‘wrong’ poverty line, or Canada/U.S. or state/provincial differences in reporting of income, e.g., from the underground economy or household production) that might produce differences across provinces/states in levels will tend to ‘difference out.’

Poverty intensity depends partly on the difficulty of escaping poverty, and a key issue for the non-elderly is the general availability of jobs. In explaining the decline in U.S. poverty, Rebecca Blank puts primary stress on the strong U.S. macro-economy. As she notes: ‘In times of high unemployment, it is disproportionately the less skilled who are unemployed, underemployed, working part time or out of the labour market, and it is these workers who benefit the most from an economic expansion’ (2000, 7). During the 1990s, however, U.S. and Canadian unemployment experience has diverged substantially. In explaining this, Fortin (1996) and Riddell (1999) have laid primary emphasis on the divergent monetary policies of the U.S. Federal Reserve and the Bank of Canada. The adoption of an explicit target range of 1 to 3 per cent for inflation in Canada has not been emulated by the United States, and the Federal Reserve continues to emphasize the costs to output and employment of such a one-dimensional perspective on monetary policy.11 Blank emphasizes the importance for poverty outcomes of the U.S. Federal Reserve’s ‘managing monetary policy so that it does not choke off the expansion’ (2000, 13), but the Bank of Canada has followed a different course. For present purposes, this divergence in policy choices is important, because it may be that the economic insecurities that are popularly associated with technology and greater trade liberalization would be better focused on monetary policy choices.

To account for the influence of macroeconomic conditions, in this paper the male unemployment rate (ages 25 to 54) is used for each province/state for 1994 and 1997. However, the impact of aggregate labour demand on poverty is unlikely to be linear. When unemployment rates are high, a 1 percentage point shift may largely produce changes in the employment probability of middle-class workers, but as the labour market tightens up, employers have to start to consider more seriously the job applications of the disadvantaged. Hence, the preferred specification is the natural logarithm $\ln(\text{unemployment})$, since that gives greatest weight (in reducing poverty) to changes in unemployment that occur at low levels of unemployment.

Although variations in unemployment will cause changes in earned income, jobless individuals may escape poverty if they can claim unemployment benefits and if those benefits adequately replace lost earnings. There is an enormous literature on unemployment insurance and its impacts. Atkinson and Micklewright (1991), Myatt (1996), and Osberg (1996), for example, have surveyed the evidence on the connection between unemployment compensation and unemployment and have stressed the complexity of UI systems and the inadequacy of a simple story of UI disincentives. Sargent (1995) has noted that a variety of indices of UI have been

---

11 See Federal Reserve Bank of New York (1998). In practice, the Bank of Canada has achieved inflation rates that are generally in the 0 to 2 per cent range (at the cost of a national unemployment rate that has been about 4 percentage points above U.S. rates through much of the decade).
used in the Canadian literature, often imposing arbitrary assumptions, such as the time horizon over which labour/leisure choices are made.

Researchers face difficult choices in attempting to summarize a complex system such as UI in a small number of variables.\textsuperscript{12} That difficulty is magnified when the system changes structurally (as in 1996 in Canada) and when the point at issue is a comparison with the ‘generosity’ of an amalgam of fifty heterogenous state systems that differ somewhat from each other and have had a quite different structure from Canadian UI. As a consequence, direct comparisons of U.S. and Canadian UI are surprisingly rare\textsuperscript{13} (but see Moorthy 1990). In this paper UI involves two key issues – the probability of getting benefits (modelled as unemployment insurance beneficiaries as a percentage of the number of unemployed) and the value of benefits if received (average benefits per beneficiary).\textsuperscript{14}

Although social assistance systems also have many complex provisions, a plausible index of overall generosity is the maximum amount a single parent with one child would receive for one week. The National Council of Welfare calculates an annual amount for each Canadian province, including all provincial benefits and federal tax credits, which is prorated to a weekly basis. For U.S. states, the maximum food stamp amount and AFDC/TANF monthly amounts are added together and prorated. All payments are calculated in 1997 Canadian dollars using purchasing power parities and the relevant inflation rate.

In Canada, the supposedly homogenizing effect of free trade was a prominent part of the ‘Great Debate’ over FTA and NAFTA: Is the recent convergence in poverty due to trade liberalization? Despite Americans’ having had internal free trade for over 200 years, however, income inequality and poverty outcomes vary a lot within the United States.\textsuperscript{15} A wide range of social welfare payments are made by states. One reason why different policy regimes can continue to exist at the state/provincial level is the fact that choice in anti-poverty policy comes relatively cheap.

In 1997 average social assistance benefits per recipient (AFDC/TANF plus food stamps) in Vermont were $287.10 (US), almost the same as in Minnesota ($289.50)

\textsuperscript{12} The 1996 reforms to Unemployment Insurance in Canada included a change of name – to ‘Employment Insurance’ – but in this paper I will simply refer to UI in both Canada and the United States. Canadian UI (now called EI) is a federal program, but its provisions vary with local unemployment, which differentiates its impact by province. U.S. UI systems are arguably even more complex than those of Canada. A summary of the systems of the fifty states and DC can be obtained from U.S. Department of Labour, \textit{Significant Provisions of State Unemployment Insurance Laws}; http://www.itsc.state.md.us/ui_manage/SIGPRO/adobe_intro.htm xxx.

\textsuperscript{13} Osberg and Phipps (1995) used a micro simulation methodology to compare Canadian UI with the New York and Texas systems and also examined international comparisons, concluding that in 1994 UI played an important anti-poverty role in Canada, partly because of the relatively large size of UI in the social transfer system, compared with the situation in other countries. The 1996 reforms to UI paid no noticeable attention. In Canada, the percentage of the unemployed who get UI/EI has since declined precipitously (to about 25 per cent in 1997; HRDC (1998), table 4.1).

\textsuperscript{14} Results similar to those reported here are obtained if one uses the same variable as Moorthy (1990): total UI benefits as a fraction of total earnings.

\textsuperscript{15} Bernstein et al. (2000, table 10) note that in 1996–98 the ratio of the before-tax incomes of the top quintile of families to that of the bottom quintile varied from 7.3:1 in Indiana to 14.1:1 in New York.
but much above Texas ($132.50) and Mississippi ($107.20). At such low income levels, these differences in benefits make a huge difference to the personal well-being of recipients, but it is unlikely that U.S. taxpayers notice much impact. Across U.S. states, in 1997 total AFDC/TANF expenditures plus food stamps averaged 2.51 per cent of state revenues. At this level, differences in state expenditures are unlikely to motivate any appreciable movement of capital or labour. It is clear that anti-poverty policy is not about what local government can ‘afford’ to do and not about what competitive markets and trade liberalization ‘make’ them do – it is about choices. The heterogeneity in outcomes and policies should induce some scepticism about the homogenizing effects of trade – but what is the independent impact of trade exposure?

The exposure of a state or province to international trade can be modelled as the product of the industrial composition of the labour force and the trade exposure of industries. Although popular discussion often focuses on job loss and the negative impact of imports on employment, regions in which exports grow rapidly are also part of the trade dependence story. Because the hypothesis that import and export exposure has different impacts nests the hypothesis that their impacts are similar and because provinces and states differ considerably in relative exposure to imports/exports, in this paper measures of both import and export exposure are constructed. The variable consists of the product of the proportion of the state’s or province’s labour force by industry and the trade exposure of each industry – exports or imports by industry as a proportion of the output of that industry at the national level.

The question asked here is whether the change in poverty intensity in provinces and states observed between 1994 and 1997 can be explained by changes in trade exposure, aggregate unemployment, social assistance, or unemployment insurance. The sample size used to construct estimates of poverty (particularly for the smaller U.S. states) is sufficiently small that some state rankings are not statistically meaningful. The data do provide an unbiased estimate of each state’s characteristics, however, albeit with a standard error of estimate due to sampling variability. In this

16 The state of Texas spent 3.31 per cent of state revenues on these programs, while Mississippi spent 4.04 per cent, Vermont spent 3.23 per cent, and Minnesota spent 1.05 per cent.
17 Export and import data are obtained for 2-digit categories, using the 1980 industrial classification system for Canada and the major groupings industrial classification system for the United States. The trade data include agriculture, mining, and manufacturing industries, but do not include services. The industry-level labour force data use the same industrial classifications. For Canada, the Monthly Labour Force Survey is used, with an average being taken for the twelve months of 1994 and 1997. For the United States, non-farm employment rather than the total labour force is used. For each state or province, the proportion of the labour force in each industry as a percentage of all employment is calculated. Finally, the proportions of the labour force in each industry are multiplied by the share of exports (or imports) in output, and then summed for each province or state.
18 U.S. data come from a sample of 66,014 households in 1994 and 50,320 in 1997, while Canada used 37,475 households in 1994 and 33,843 in 1997. Because the U.S. sample is spread over fifty states, smaller states have relatively small samples and a relatively large potential sampling error. Although the point estimate of poverty intensity is unbiased, this sampling error implies that the ordering of states in poverty intensity is possibly sensitive to sample selection – hence, in this paper I place no emphasis on the ranking of particular states.
paper, therefore, I use a bootstrap procedure to compute the standard deviation of the SST index of poverty intensity and generalized least squares to assign to each observation a weight inversely proportional to its bootstrap standard error of estimate.

In columns 1 and 2 of table 2 are presented the GLS estimates obtained when poverty intensity is calculated with reference to a relative poverty line, while in columns 3 and 4 the results obtained when the SST index is measured with respect to a fixed real dollar poverty line are reported. The primary difference in results is that the unemployment insurance and social assistance coefficients are larger when poverty is measured in absolute terms than when it is measured relatively. When columns 1 and 2 are compared with columns 3 and 4, it can be seen that the change in impact of the probability of receiving any UI benefits is particularly notable. In Canada, the change in poverty criterion has the effect of counting more of the working poor – for whom marginal changes in benefit replacement have much less impact than total denial of benefits. As Osberg and Phipps (1995, 51) noted, in Canada in 1994, ‘Households with unemployment who do not receive UI experience extremely high rates of poverty.’

In general, in either specification, estimated coefficients have the expected sign and are significant and of plausible magnitude. Overall, between 1994 and 1997 poverty intensity for the non-elderly fell by 2.28 points in the United States and rose by 1.26 points in Canada. In the two largest jurisdictions the swing was even larger – a fall of 2.9 points in California, compared with a rise of 2.2 points in Ontario. Both the logarithmic specification in columns 1 and 3 and the linear specification in columns 2 and 4 imply that a decline in unemployment similar to that which occurred in California (from 8.7 to 6.2 per cent) would produce a decline of between 1.3 and 1.9 points in poverty intensity. Ontario also had a fall in unemployment in this period, which the results of table 2 indicate would have cut poverty by 0.9 to 1.6 points.

Ontario also experienced an increase in trade exposure and cuts to (Un)employment insurance and social assistance. The impact of changing trade exposure is the net effect of exports and imports. In table 2 the coefficient on the change in trade exposure is always insignificant. Overall, in Ontario’s case the net impacts of UI cuts and trade exposure approximately balance the positive impact of declining unemployment. The regression results of table 2 imply that Ontario’s 21 per cent cut to social assistance payments in 1996 largely accounts for the rise in poverty intensity observed there.

To compute the bootstrap standard deviation of the modified SST index estimator, we resample randomly both equivalent incomes and corresponding sampling weights. The new sample is used to compute a new SST index estimate. Repeating this process $T$ times (e.g., $T = 300$) gives $T$ SST index estimates. The bootstrap variance is computed as the sample variance of the $T$ SST index estimates from the resampling; see Osberg and Xu (1997) and the references therein.

Osberg and Cyrus (2000) note that the level of trade exposure is not related to the level of poverty intensity. If Moorthy’s specification is used for UI, greater export exposure may be associated with lower poverty – hence, the general insignificance of trade is not robust to specification – but there is no evidence that greater import exposure is driving poverty trends.
In the longer term, poverty trends will be influenced by the success or failure of the education system in equipping entering cohorts of workers for the labour market. The stock of education qualifications changes at the margin, however, to the extent that the characteristics of entering cohorts differ from those of retirees, so change is necessarily a rather slow process. Hence, the education system cannot be expected to have much influence on poverty intensity in a three-year time span. Similarly, variables, such as the unionization rate, the degree of labour market discrimination, or the structure of the Earned Income Tax Credit did not change much in three years. The advantage of looking at the changes in poverty intensity by jurisdiction is the fact that first differencing reduces the possible influence of measurement errors and unobserved variables; the disadvantage is that variables that change on longer time scales also ‘difference out.’

As well, cross-sectional regression results are bedevilled by a surfeit of possible explanatory variables (relative to the degrees of freedom available) and by the necessity of constructing summary statistics to encapsulate the influence of complex systems, such as UI. Micro data on individuals offer researchers many more degrees of freedom in a statistical sense, but at the cost of fundamental uncertainty as to whether the researcher is estimating the relative advantage that personal characteristics provide or the absolute impact of characteristics on income. A correlation between low individual education and poverty, for example, can be interpreted either as reflecting the relatively low position in the job queue of the less credentialed or as indicative of absolutely lower labour productivity. The social returns to education implied by the two hypotheses are very different; if more education means simply that the recipient moves up a queue, some one else loses relative position and there is no net decline in poverty.

Overall, the results of table 2 are consistent with the hypothesis that changes in macroeconomic conditions, unemployment insurance and social assistance are important determinants of the changes observed in North American poverty in the 1990s. The lack of significance of trade exposure is consistent with the continued heterogeneity of policies and outcomes among U.S. states, despite many years of free trade. The fixed-effects results also are, in general, consistent with the cross-sectional levels results reported in Osberg and Cyrus (2000).

The general moral of this section can therefore be summarized as ‘choices to make.’ Policy choices matter. Despite the greater exposure of all jurisdictions to international trade, it is clear that some jurisdictions continue to make macroeconomic and social policy choices that imply less poverty at the local level. What is the significance of this?

4. Social significance: Does low annual income matter?

With only a few exceptions, the poverty literature uses an annual accounting period. In general, poverty indices are unaffected by when income is received during the accounting period or by what happens to individuals before or after. For poverty
measurement, however, a year is both ‘too short’ and ‘too long’ a period of time. If the issue is income adequacy, a year can be too long a period – indeed, those who have no money, no credit, and no groceries can get very hungry in much less than a week. As a consequence, social agencies always have had to recognize the existence of immediate needs for assistance. On the other hand, if the issue is the social and psychological impacts of poverty, then long-term poverty will be the focus. As well, the long-term poor are clearly worse off than the short-term poor, other things being equal. Analysts who share the concern of Rawls (1971) for the ‘most disadvantaged’ will therefore be most concerned with the long-term poor and with shifts in the distribution of poverty spell durations that increase the prevalence of long durations.

An annual time frame is thus an awkward compromise. Pendakur (1998) and others have also argued that well-being depends on consumption, not income, and hence consumption should be the focus of measurement. Income-based measures of poverty are imperfect indicators of consumption deprivation, since some individuals with low income can sometimes get access to credit, run down their stock of consumer durables, beg from friends and family, and so on. However, although credit markets for consumption smoothing are easily available to the affluent, the same is usually not true for the poor. Furthermore, the longer and the more frequent that spells of low income are, the higher is the probability that buffers to current consumption will be exhausted and the greater will be the actual material deprivation that corresponds to poverty in current measured income.

The duration and frequency of low-income spells, in combination with credit constraints, are therefore crucial to the real extent of economic deprivation. As well, much social concern with poverty is based on the adverse psychological and sociological implications of poverty – especially for children, but also for adults. For any given set of social norms, these impacts may be relatively small for short-term deprivation (e.g., a middle-class divorsee who remarries quickly) but will increase with the duration of an individual’s poverty experience. Moreover, the social norms and stereotypes associated with low-income status probably depend heavily on the distribution of poverty durations. A given rate (or depth) of poverty may be produced by either a high-turnover/short-duration process or a low-turnover/long-duration process. The degree of stigma that low income implies depends partly on whether a poor person lives in a society where quite a few of today’s non-poor have experienced a short-duration poverty spell, or whether the poor live in a community in which a preponderance of long-duration spells among a small minority of the population has created a pervasive set of social stereotypes.

As a practical matter, poverty measurement has historically been constrained by the limited number of high-quality longitudinal data sets that are available and the

21 Black and Morgan (1999) note that a third of U.S. households do not have a credit card, while Wolff (1998, 36, table 1) finds that 28.7 per cent of U.S. households have zero or negative financial wealth. Indeed, a substantial fraction of U.S. households are quite cut off from the formal financial system: Carney and Gale (1998, 14) note that ‘45 per cent of black families and 49 per cent of those on public assistance do not have basic transactions accounts.’
small sample size of those (such as the PSID) that do exist. Measures of poverty that incorporate a duration dimension also have not been common (but see Osberg and Xu 1999b). Poverty researchers have also focused on annual income for the practical reason that most low-income households consume almost all their income, and income is arguably somewhat more reliably measured than consumption.  

New data sets (such as Statistics Canada’s Survey of Labour and Income Dynamics) are becoming available, however, which will enable researchers to track individuals as they move through a sequence of households each of which varies in duration and frequency of low-income spells. The duration dimension of low incomes and the actual degree of credit availability and consumption inadequacy for low-income households are crucially important for evaluation of social insurance programs.

Although duration issues are likely to be important areas on the future research agenda, in the end it would be odd if economists were to conclude that annual income is unimportant for those who have the least of it. Although there is a literature on subjective well-being that finds ‘surprisingly small correlations’ between income and self-reported happiness (see Diener and Suh 1997, 201), economics as a discipline relies heavily on the idea that annual money income does matter – and any degree of diminishing returns implies that it matters most for those who have least.

A more profound critique questions the relationship between income poverty and ‘capabilities.’ Sen (1999, 87) has argued that ‘poverty must be seen as the deprivation of basic capabilities rather than merely as lowness of income.’ The use of the term ‘merely’ is partly due to context. Since Sen is writing about international development issues, he is concerned about restrictions on human capability, such as the purdah imposed on Afghan women by the Taliban regime or the importance of basic literacy to life choices. These extreme forms of non-monetary deprivation are not the issue in North America, but the general issue that Sen is raising is the substantive freedom of the poor.

Sen has argued (1999, 90) that ‘What the capability perspective does in poverty analysis is to enhance the understanding of the nature and causes of poverty by shifting the primary attention away from means (viz., income) to ends that people have reason to pursue, and, correspondingly, to the freedoms to be able to satisfy these ends’; emphasis in original. Since he also argues (1999, 74) that one should evaluate social outcomes in terms of the ‘substantive freedoms – the capabilities – to choose a life one has reason to value’ which individuals actually possess, the capability perspective broadens the discussion of poverty beyond budgetary limitations on the purchase of market goods.

Sen’s work reminds us that the ‘social wage’ of public services in health care, education, and the urban environment (e.g., mass transit) is even more important to the poor than to the affluent, since the poor do not have the money with which to

22 Although there is also a normative argument that one should not count misers as poor simply because they prefer deprivation to using available income for consumption, in fact, surveys of consumer finance indicate such people are rare.
purchase market substitutes. If individuals are to have substantive freedoms, they need access to economic resources. In many countries, the public sector historically has been an important provider of such access. At any point in time, as Smeeding et al. (1993, 229) note when comparing countries, ‘noncash income reinforces the redistributive impact of conventional (cash) tax-transfer mechanisms.’23 Over time, however, changes in the ‘social wage’ clearly have a major impact on the degree of real deprivation that corresponds to a given deficiency in money income.

In drawing the link between poverty, capabilities, and freedom, Sen is echoing a long tradition in the human rights literature. For example, United Nations General Assembly Resolution 32/130 of 1977 stated: ‘All human rights and fundamental freedoms are indivisible and inter-dependent . . . The full realization of civil and political rights, without the enjoyment of economic, cultural and social rights is impossible.’24 In 1948 the Universal Declaration of Human Rights specified a fairly comprehensive list of economic rights – declaring, for example, in article 25: ‘Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other loss of livelihood in circumstances beyond his control.’25

The actual exercise of human rights typically requires a basic level of economic resources. For example, article 12 of the UN Universal Declaration of Human Rights asserts a right to privacy, but it is entirely unclear what ‘right to privacy’ the homeless have, in actual fact. Privacy requires control over a definable personal space, which, in a market economy, generally requires the ownership of property or the income with which to rent property. The lack of such income (or an equivalent in-kind transfer) can therefore be seen as a human rights issue. Atkinson has commented, ‘A minimum rights approach to the measurement of poverty may lead us to adopt the simple head-count’ (1998, 49), since deprivation of basic human rights can be seen as an either/or condition.26

Furthermore, underlying rights such as freedom of conscience and religion (Article 18), opinion, and expression (article 19) or assembly and association (article 20) is the conception that individuals have the right to participate freely and responsibly in the life of their communities. The connection between poverty and ‘social exclusion’ (generally thought of as the inability to participate in the normal activities of

23 A smaller fraction of the poor are helped by MEDICAID in the United States than are assisted by medicare in Canada. The greater prevalence of local school board funding in the United States entails a greater tendency to intergenerational inheritance of human capital. Both affect poverty levels but not changes in poverty intensity.
24 Unlike the United States, Canada voted in favour.
25 Article 2 states that all rights are to be guaranteed equally to male and female persons. As well, articles 23 and 24 specify employment and collective bargaining rights, and articles 26 and 27 deal with rights to education and cultural expression. Full text is available at http://www.unhchr.ch/.
26 See also Bourguignon and Fields (1997). If the degree of deprivation of rights is an acceptable consideration, however, one is back to the same issues as are involved in the poverty gap.
society – see Atkinson 1998, 27) is therefore of great importance. In recent years, the term has become prominent in the European literature. From Adam Smith to Amartya Sen, exclusion has always been a large part of the concept of poverty and the concerns that surround it. Social exclusion is more than poverty, however, since unemployment, disability, and discrimination all can be powerful barriers to social participation, even if income flows are adequate.

As Saunders (1998, 39) has commented: ‘central to any realistic definition of poverty (is) that poverty involves involuntary restrictions on choice and that it is socially specific, grounded in a particular society or culture.’ Hence, delineating the links between income poverty, capabilities, basic human rights, and social exclusion, in the North American context, is an important set of research issues. Money income deficiency is far from the full story. However, in the measurement and analysis of poverty, annual money income is also a commonly measured variable with a clear, commonsense rationale. Although it is an imperfect indicator of ‘want of the necesseties of life,’ future research on poverty will undoubtedly focus on tracing out the combinations of social wage, household assets, and money income flows that can prevent deprivation of capabilities and social exclusion.

4.2 Why might poverty matter?
Clearly, income poverty affects many people directly right now, because they are currently poor. Moreover, in a turbulent labour market with shrinking social welfare programs, the probability and depth of potential poverty affects the sense of economic insecurity with which many non-poor contemplate the future.27 Although poverty has been discussed for centuries, however, very little of the discourse on poverty was actually written by the poor or near poor. So why have the non-poor cared about poverty? In 1683 Sir Matthew Hale, lord chief justice of Kings Bench, gave three reasons:

A due care for the relief of the poor is an act,
1 . . . of great Piety towards Almighty God, who requires it of us; . . .
2 . . . of greatest Humanity among men. Mercy and Benignity is due to the very Beasts that serve us, much more to those that are partakers of the same common nature with us.
3 . . . of great Civil Prudence and Political Wisdom: for Poverty in it self is apt to Emasculate the minds of men, or at least it makes men tumultuous and unquiet. Where there are many very poor, the Rich cannot long or safely continue such.

Among the securely affluent, concern with poverty has always been motivated by a mixture of ethics, humanitarian empathy, and enlightened self-interest – an uncer-

27 The poverty rates reported in table 1 imply that over 3.6 million Canadians and 45 million Americans were poor in 1997, on an annual income basis. Finnie (2000) estimated that 26.4 per cent (about 7.9 million) Canadians had at least one year of poverty between 1992 and 1996. Drolet and Morissette (2000) report that the percentage of Canadians who experience one low-income year in a four-year span is about twice the poverty rate in any given year. Ruggles (1990, 99) found that roughly four times as many Americans had poverty spells of a month or more as were poor on an annual income basis.
tain mix, which may explain some of the conflicting emphases one observes in the analysis of poverty.

Moralism may not necessarily produce a positive concern for the poor.\textsuperscript{28} One way for the affluent to justify rejection of concern about poverty is to assert that the poor are morally deficient and the authors of their own misfortune. The distinction between ‘deserving’ and ‘undeserving’ poor thus has long been a staple of the poverty debate. Adam Smith captured both the relative nature of poverty and the shame (and social exclusion) produced by a prevailing moralistic evaluation of the causes of poverty when he wrote: ‘A linen shirt, for example, is, strictly speaking, not a necessary of life. The Greeks and the Romans lived, I suppose, very comfortably, though they had no linen. But in the present times, through the greater part of Europe, a creditable day-labourer would be ashamed to appear in public without a linen shirt, the want of which would be supposed to denote that disgraceful state of poverty, which, it is presumed, no body can fall into without extreme bad conduct’ (1661, vol. 2, bk V, ch. II, pt II, art. IV, 399).

The moralistic element in the poverty debate is surely part of the reason why one strand of the current literature narrows the focus of discussion to the poverty of children, whose clear lack of power presumptively identifies them as ‘deserving.’ Part of the concern of the affluent with child poverty, however, also undoubtedly stems from an ‘enlightened self interest’ motivation. Although today one would likely say that poverty causes suboptimal investment in human capital, rather than use the more colourful phrasing of 1683 that poverty ‘is apt to Emasculate the minds of men,’ the underlying idea has much in common – and the endogenous growth literature would now add that the long-run economic growth rate will be higher when the children of the poor can acquire human capital (see Banerjee and Newman 1994; Osberg 1995; Bénabou 1996).

Concern with child poverty as a denial of ‘equality of opportunity’ may also have blended motivations. For some people, such concern is ethically motivated. Many economists have emphasized Rawls’s argument that ‘Justice as fairness’ entails maximizing the well-being of the least advantaged. This ethical perspective, however, would motivate a concern with the long-term poverty of all persons, not only children. An equally important criterion for Rawls is that any inequalities in offices and positions are ‘open to all under conditions of fair equality of opportunity’ (1982, 162), which does mandate special consideration for the life chances of poor children. ‘Equality of opportunity’ may also appeal to the enlightened self-interest of the affluent, based on the political judgment that a perception of fairness is essential for long-term political legitimacy. In a secular age, the capitalist system cannot depend on the sort of ‘divine will’ rationales for inequality that feudalism

\textsuperscript{28} Attitudes to poverty differ significantly across countries. Using the World Values Survey, Phipps (1999, 36–7) found that 34 per cent of Canadian men (29 per cent of women) thought ‘laziness’ was the reason some people lived in need – less than in the United States (40 per cent, 38 per cent), but more than in the United Kingdom (28 per cent, 25 per cent) and much more than in Norway (15 per cent, 7 per cent) or the Netherlands (18 per cent, 12 per cent).
could rely on, so maintaining belief in ‘equality of opportunity’ is important for political legitimacy. As well, since children live in families, it is not really possible to address child poverty, independent of the poverty of their parents.

There is also good reason for keeping the economic deprivation of childless adults on the agenda. From a research standpoint, the recent outpouring of work on ‘social capital’ and ‘social exclusion’ represents both a broadening of the poverty debate and a blending of the humanitarian empathy and enlightened self-interest motivations for concern with poverty. Knack and Keefer (1997) have argued, for example, that cohesive communities with higher levels of trust have higher rates of economic growth. Both the broader concept of social exclusion and the narrower idea of income poverty have been linked to some very expensive social problems. For instance, a large literature has established beyond reasonable doubt the impact of poverty, and economic inequality more generally, on individual health and health care costs. For many years, the link between poverty and crime has been a staple of the criminology diet. Enlightened self-interest would motivate recognition that adult poverty has many externalities – in health care costs, crime, and the urban environment – which may be very costly to other citizens. A concern with adult poverty can also be justified by humanitarian empathy, which presumably does not vanish on the eighteenth birthday.

5. Implications – choices to make

Currently, one observes a wide range of poverty and social policy outcomes, within both Europe and North America. During the 1990s in Canada and the United States there have been common trends – rapid growth in trade, rapid technological change, and a common theme of devolution to states (provinces) of responsibility for social policy – but there continues to be a wide range in the poverty observed at the province/state level. The basic message of this paper is, therefore, the importance of the decisions that are being made at those levels.

On a national basis, it is clear that Canada’s distinctiveness in poverty outcomes has been eroded dramatically in the late 1990s – but in a longer-term perspective, it may be more important to explain the differences in local culture within both Canada and the United States that continue to produce different policy choices at the local level.

This paper contains no evidence that greater levels of trade exposure can be blamed for poverty. Instead, it is argued in this paper that public policy decisions on macroeconomic priorities, social assistance support, and unemployment insurance are the choices that mattered for recent changes in poverty intensity. The decisions made by Canadian provinces and American states will therefore be of great impor-

30 The National Council of Welfare (2000) emphasizes that the poverty/crime link may initially be one of policing bias, but it has real feedback effects on later life chances.
tance in determining the types of society that Canadians and Americans will inhabit in the future.

Appendix: Data sources


**Purchase Power Parities** Statistics Canada, CANSIM Matrix 8631, label D23283
– Purchasing Power Parities, Private Final Consumption. U.S. dollars per Canadian dollar, SNA Classification

**References**

Angus Reid (1999) *Poverty in Canada*, Globe and Mail/CTV Poll (conducted 18–26 November; released 17 December); available at www.angusreid.com


Blackorby, C., and D. Donaldson (1980) ‘Ethical indices for the measurement of poverty,’ *Econometrica* 48, 1053–60

Blank, R.M. (2000) ‘What can other countries learn about fighting poverty from U.S. welfare reform?’ the 2000 J. Douglas Gibson Lecture, delivered 6 March, School of Policy Studies, Queen’s University, Kingston


Focus (1998) ‘Revising the poverty measure,’ Special Issue, \textit{Focus} 19(2), University of Wisconsin-Madison, Institute for Research on Poverty


Hale, M. (1683) \textit{A Discourse Touching Provision for the Poor}. Printed for William Shrowsbury, at the Bible in Duke-Lane; full text available at http://www.ecn.bris.ac.uk/het/hale/poor


— (1985) Commodities and Capabilities (Amsterdam: North-Holland)
seven nations: the effect of noncash subsidies for health, education and training,’
Review of Income and Wealth 39, 229–56
Statistics Canada (1998) Low Income Measures (LIMs) 1996, Household Surveys Divi-
sion, Catalogue 13-582-XPB (Ottawa: Statistics Canada)
New York: Routledge)
— (1999) ‘Income inequality, social cohesion and health: clarifying the theory, a reply to
Muntaner and Lynch,’ International Journal of Health Services 29, 525–43
Conference on ‘Benefits and Mechanisms for Spreading Asset Ownership in the United
States,’ 10–12 December, New York
ological concerns and possibilities – a discussion paper,’ Research Papers Series, Sta-
tistics Canada, Ottawa
report by the Federal/Provincial/Territorial Working Group on Social Development
Research and Information, Ottawa
ty,’ Journal of Income Distribution 8, 143–52
Xu, K., and L. Osberg (1998) ‘A distribution-free test for deprivation dominance,’ Econo-
metric Reviews 17, 415–31
posability and its subgroup decompositions,’ Department of Economics Working Paper
99-05, Dalhousie University, Halifax
— (2000) ‘The social welfare implications, decomposability and geometry of the Sen
family of poverty indices,’ Working Paper, Dalhousie University, Halifax